



Fairfax Green Initiatives Implementation Matrix

On February 5, 2019, the Board of Supervisors (Board) unanimously adopted the [Fairfax Green Initiatives Board Matter](#), introduced by Supervisors Storck, Foust and (now Chairman) McKay to expedite consideration and implementation of 19 energy-related action items.

On July 28, 2020, the Board unanimously adopted the [Fairfax Green Initiatives #2 Board Matter](#). Introduced by Supervisor Storck, the Fairfax Green Initiatives #2 Board Matter includes 14 additional environment and energy-related action items.

Staff developed an Implementation Matrix for Fairfax Green Initiatives in June 2019. For each action item, the matrix identifies the County department(s) charged with implementation, whether the action item is complete or ongoing, whether the item will be addressed through the ongoing planning process for the Community-wide Energy and Climate Action Plan (CECAP), whether consideration for action items not yet addressed is anticipated in CY 2020 or CY 2021, and a summary of action to date. The Implementation Matrix has been updated on a quarterly basis to reflect progress made on Fairfax Green Initiatives. The latest version is included below.

Fairfax Green Initiatives #1							
Action Item	Lead Dept.	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
					CY2020	CY2021	
1. Direct the County Executive to report to the Environmental Committee no later than June 2019 on:							
1a. A draft process, resources and timeline to develop a CECAP.	OEEC	X		X			Staff presented a draft process, resources and timeline for a CECAP at the June 2019 Environmental Committee meeting. The Board approved funding in September 2019, and the CECAP planning process kicked off in January 2020.



Fairfax Green Initiatives Implementation Matrix

Fairfax Green Initiatives #1							
Action Item	Lead Dept.	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
					CY2020	CY2021	
1b. A process for contracting with an ESPC or recommend other such initiatives that produce a similar outcome and timeframe.	OEEC	X					Staff presented a process to contract with an Energy Service Company (ESCO) at a June 2019 Environmental Committee meeting. Following Board endorsement, staff is conducting a selection process and is close to finalizing its selection.
2. Refer to the Development Process Committee for discussion and consideration whether County staff should review and report back to the Committee on the costs and benefits of the following:							



Fairfax Green Initiatives Implementation Matrix

Fairfax Green Initiatives #1							
Action Item	Lead Dept.	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
					CY2020	CY2021	
2a. Comprehensive Plan and Zoning changes that would incentivize and support more environmentally sustainable development.	DPD		X	X			<p>As part of an ongoing Zoning Ordinance Modernization (zMOD) project, new uses have been proposed to support electric vehicle charging infrastructure and solar projects at residential, commercial and County facilities. A Consolidated Zoning Ordinance Draft was presented at a July 2020 Land Use Policy Committee meeting. Public hearings on the proposed zoning changes are expected to take place in early 2021.</p> <p>Additional Comprehensive Plan and Zoning changes may be identified in the ongoing CECAP planning process.</p>



Fairfax Green Initiatives Implementation Matrix

Fairfax Green Initiatives #1							
Action Item	Lead Dept.	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
					CY2020	CY2021	
2b. Building design and code changes, including the International Green Construction Code (IgCC), that could inspire and expedite energy saving practices on all new construction and significant renovations.	LDS		X		X		In a June 2020 memo to Supervisor Smith, LDS identified roadblocks and potential paths forward on adopting the IgCC in Fairfax County. LDS is performing additional analysis on regulations, programs and initiatives in other jurisdictions that encourage energy saving strategies in commercial and residential construction. A follow-on memo is expected in October 2020.
3. Refer to the Budget Committee for discussion and consideration the following:							



Fairfax Green Initiatives Implementation Matrix

Fairfax Green Initiatives #1							
Action Item	Lead Dept.	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
					CY2020	CY2021	
3a. GO, ED and other capital bonding options that could accelerate energy saving initiatives, provide high economic returns on investments and support other community benefits that would enable green building, energy savings renovations and green purchasing practices.	DMB	X					The County will continue to utilize all debt financing mechanisms to address its capital needs and maintain adherence to its self-imposed debt ratios. The County's Capital Improvement Program assumes an out-year bond referenda program that incorporates LEED certification for all future project cost estimates to further the County's commitment to green initiatives.
3b. Support for the County Executive's current consideration for the FY 2020 budget of increased dedicated County energy, climate change and environment related staffing.	DMB	X					The FY 2020 budget included dedicated funding for the Office of Environmental and Energy Coordination (established in July 2019).
4. Refer to the Environmental Committee for discussion and consideration the following:							



Fairfax Green Initiatives Implementation Matrix

Fairfax Green Initiatives #1							
Action Item	Lead Dept.	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
					CY2020	CY2021	
4a. Discuss accelerating goals and targets for the Operational Energy Strategy.	OEEC FMD FCPA DVS		X		X		The County is on track to meet or exceed several of the goals in the Operational Energy Strategy, particularly in the energy use and efficiency, green buildings, innovative energy solutions, and electric vehicles focus areas. Specific initiatives in the energy use and efficiency and innovative energy solutions focus areas are detailed in October 2020 memoranda to the Board from the County Executive.



Fairfax Green Initiatives Implementation Matrix

Fairfax Green Initiatives #1							
Action Item	Lead Dept.	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
					CY2020	CY2021	
4b. Brief Committee on options to increase the pursuit of grant and cooperative agreement funding for energy efficiency, conservation, weatherization, cogeneration, renewable energy, energy resilience and greenhouse gas emission reductions, through public-private partnerships, foundations, the Commonwealth of Virginia and the Federal government to provide greater energy reduction support for all residents, consistent with One Fairfax.	DEI DPWES		X		X		<p>DPWES-Wastewater Management Division has contracted with an ESCO to perform an investment grade audit of the Noman M. Cole Pollution Control Plant. Work is expected to be complete by the end of CY 2020. Wastewater Management has also received grant money from CP Energy to install energy efficient equipment at the plant.</p> <p>DEI, in collaboration with DOT, and through a grant from the Virginia Dept. of Rail and Public Transportation, launched the Relay pilot project, in which an electric, autonomous shuttle will transport riders to and from the Mosaic District and the Dunn Loring Metro Station. With support from Dominion Energy and the Virginia Transportation Research Council, the pilot will increase access to transit stations and increase the County's understanding of autonomous, low emissions technology.</p>



Fairfax Green Initiatives Implementation Matrix

Fairfax Green Initiatives #1							
Action Item	Lead Dept.	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
					CY2020	CY2021	
4c. Discuss setting a goal that by 2025, locally generated energy (like solar) would offset County Government energy usage.	OEEC DPWES DPD FMD FCPA			X			Action item will be evaluated under the ongoing CECAP planning process.
4d. Complete Committee and staff work for C-PACE adoption by July 2019 with implementation by the end of 2019.	OEEC	X					Fairfax County's C-PACE program launched in February 2020.
4e. Expedite consideration of R-PACE or other capital funding options to support residential energy use reductions.	OEEC		X				Implementation requires the passage of enabling legislation in the General Assembly. Staff will continue to monitor and provide updates on legislative activity to the Board.
4f. Identify timeframe for developing a County-specific Climate Resiliency and Adaptation Plan.	OEEC DPWES OEM DPD LDS FCHD	X					Staff presented a timeframe for a Climate Adaptation and Resilience Plan at the May 2020 Environmental Committee meeting. The Board approved funding in September 2020, and the planning process is expected to kick off in January 2021.
4g. Report quarterly on all energy and climate initiatives.	OEEC		X		X	X	Quarterly updates are provided to the Board's Environmental Committee. Additional updates are distributed in memoranda to the Board.



Fairfax Green Initiatives Implementation Matrix

Fairfax Green Initiatives #1							
Action Item	Lead Dept.	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
					CY2020	CY2021	
4h. Review local advocacy group initiatives: <ul style="list-style-type: none"> i. Fairfax to Zero Campaign (Faith Alliance for Climate Solutions or FACS) ii. Fossil Free Resolution for Fairfax County (350 Fairfax) iii. Resolution in Support of a National Carbon Fee and Dividend Program [Energy Innovation and Carbon Dividend Act of 2019 (H.R. 763)] (Citizens' Climate Lobby) iv. 12-Point Energy & Climate Action Plan for Fairfax County (Great Falls Group of VA Sierra Club and Clean Energy for Fairfax Now) 	OEEC	X		X			Leadership from FACS and 350 Fairfax agreed that their initiatives could be considered under the ongoing CECAP planning process. Both groups are represented on the CECAP Task Force. Staff shared their reviews of H.R. 763 and the 12-Point Energy & Climate Action Plan with the Board in a June 2019 memorandum.
5. Charge the Tree Commission with:							



Fairfax Green Initiatives Implementation Matrix

Fairfax Green Initiatives #1							
Action Item	Lead Dept.	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
					CY2020	CY2021	
5a. Recommending to the Board low-cost and no-cost options along with public-private partnerships that can assist residents in planting additional trees that will increase existing tree canopy. The Commission should report annually to the Board on progress and accomplishments.	DPWES FCPA	X	X				The Tree Commission approved a letter at their September 2020 meeting that serves as their first annual report. The commission anticipates providing their next annual report in June 2021.
6. Direct the County Executive to report to the Board no later than September 2019 the following:							
6a. Report on strengthening Green Building Policies for County Facilities.	DPWES FMD FCPA FCHRA OEEC	X					An update to the Sustainable Development Policy, which includes a goal to achieve Net Zero Energy eligibility for all projects beginning design by FY 2031, was adopted in September 2020. Prior to adoption, staff presented on the proposed update at a June 2020 Environmental Committee meeting.
6b. Report on a solar public-private partnership agreement.	OEEC	X					In December 2019, the County announced contracts with multiple solar power purchase agreement (PPA) service providers. Solar PPA projects are being implemented at sites throughout the County.



Fairfax Green Initiatives Implementation Matrix

Fairfax Green Initiatives #1							
Action Item	Lead Dept.	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
					CY2020	CY2021	
6c. Report on increasing County leadership and accountability for climate change initiatives:							
i. Ensure County leadership accountability for results and outcomes through SMART goals.	OEEC		X			X	
ii. Include energy management criteria in performance evaluations of departmental heads and senior executives.	DHR				X		DHR is developing criteria for departmental heads and senior executives, which is expected to be in place for FY 2021 performance evaluations.
iii. Engage County staff and departments in competitions to lower energy use.	OEEC		X			X	
iv. Develop incentive program to reward employees who provide energy saving ideas that are acted upon.	OEEC		X			X	
v. Develop partnerships like the DOE's Better Buildings Challenge.	DEI OEEC					X	DEI is planning a Pitch and Play event and follow-on pilot project with Smart City Works to increase bicycle/pedestrian safety and implement smart cities technologies. DEI has also partnered with the Economic Development Authority to explore the expansion of the green economy as part of the COVID-19 Economic Recovery Framework.



Fairfax Green Initiatives Implementation Matrix

Fairfax Green Initiatives #1							
Action Item	Lead Dept.	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
					CY2020	CY2021	
7. Encourage each Board office to:							
7a. Identify, if it has not already done so, a District environmental liaison to foster community energy savings outreach, initiatives, education and engagement, County programs awareness, partnerships with local groups and serve as liaison with County staff and other Board offices.	BOS		X				The OEEC has developed an Environmental and Communications Collaborators group, to share relevant environmental and energy information with liaisons in each of the Board offices.



Fairfax Green Initiatives #2 Implementation Matrix

Fairfax Green Initiatives #2								
Action Item	Lead Dept.	Partner(s)	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
						CY2020	CY2021	
1. Direct DPWES to:								
1a. Research and report to the Environment Committee on the options for expanding our existing internal County compost pilot to the community as part of our trash/recycling services or drop off locations. Options to be considered could include partnering with Arlington or Prince William, like with our purple bins – placing “green” compost bins beside purple bins; collections at Farmers Markets, FCPS locations, libraries and community centers; collecting, selling and/or giving away compost materials at the I-95 Landfill Complex & I-66 Transfer Station. In addition, work with other County agencies to provide community education on backyard composting at community centers, libraries and RECenters.	DPWES	FCPA		X			X	<p>On November 16, 2020, DPWES announced the launch of a pilot program, allowing community members to drop off food scraps for composting at the I-66 Transfer Station and I-95 Landfill.</p> <p>DPWES anticipates presenting more information on this item at an Environmental Committee meeting in early 2021.</p>



Fairfax Green Initiatives #2 Implementation Matrix

Fairfax Green Initiatives #2								
Action Item	Lead Dept.	Partner(s)	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
						CY2020	CY2021	
2. Direct the County Executive to:								
2a. Update the vehicle purchasing policy to accelerate purchases of County electric vehicles for the fleet of eligible sedans and expand the County's charging infrastructure to support additional electric vehicles. One hundred percent of eligible vehicles scheduled for purchase in FY 2021 shall be replaced with electric vehicles and the infrastructure needed can be supported in FY 2021.	DVS FMD OEEC	DMB DPMM FCPA		X			X	<p>One hundred percent of eligible vehicles scheduled for purchase in FY 2021, of which there are 14, will be replaced with EVs. DVS will place an order upon confirmation from FMD of the substantial completion date of all charging infrastructure required for the EVs to be operational.</p> <p>On November 4, 2020, DPMM announced a contract with an electric vehicle charging services vendor to provide charging infrastructure at County facilities. DVS, FMD and OEEC are coordinating on an EV charging implementation plan and schedule.</p>
2b. Direct staff to return to the Board with a schedule to accelerate the replacement of vehicles and infrastructure to support these vehicles, with the associated investment required, before the end of calendar year 2020 to inform the FY 2022 Budget.	DVS FMD OEEC	DMB DPMM FCPA		X		X		DVS anticipates purchasing eight units in FY 2022 using current contributions to the Vehicle Replacement Fund.



Fairfax Green Initiatives #2 Implementation Matrix

Fairfax Green Initiatives #2								
Action Item	Lead Dept.	Partner(s)	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
						CY2020	CY2021	
2c. Direct the OEEC to find immediate solutions to charging infrastructure, such as upgrading existing electrical outlets in County garages to accommodate plug-in EVs, and to adapt purchasing practices to new goal.	OEEC	DMB DPMM DVS FCPA FMD		X		X		Staff is conducting a survey to determine feasibility, capacity and resource needs for the installation of overhead and/or wall mounted chargers in County garages.
3. Direct the County Attorney to:								
3a. Report to the Environment Committee on whether the County can provide incentives for consumer EV purchases, vehicles and charging stations, or similar kinds of energy reduction or efficiency investments; or what legislative changes might be necessary to do so.	OCA	DMB DEI		X	X		X	OCA determined that the Board has authority to adopt a lower tax rate for electric vehicles, but other incentives the Board may want to provide would require enabling legislation in the General Assembly. These incentives should be identified and assessed prior to the pursuit or support of such legislation. Incentives will likely be considered under the CECAP.
4. Direct the OEEC to:								
4a. Provide a plan to the Environment Committee for consideration to implement a 5-cent plastic bag fee in 2021, as now allowed by law.	OEEC	DMB DPWES DTA OCA		X		X		Staff is developing a draft implementation process and timeline and will present these items to the Environmental Committee in December 2020.
5. Direct FMD to:								



Fairfax Green Initiatives #2 Implementation Matrix

Fairfax Green Initiatives #2								
Action Item	Lead Dept.	Partner(s)	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
						CY2020	CY2021	
5a. Assess and report to the Environment Committee costs and process to phase out all existing hydrofluorocarbon (HFC) refrigerators, refrigerant cases and air conditioners from all County facilities and equipment purchases as soon as practical but no later than 2030, including ensuring proper disposal and recovery of gases and materials. Where comparably performing non-HFC products are available, effective in 2021, all new purchases would not contain HFC.	FMD DPWES FCPA FCRHA	DMB DPMM		X			X	The lead departments are collaborating to assess, determine and report on the process necessary to accomplish this item by 2030. The departments are investigating market options, timelines and resource needs to purchase HVAC equipment with non-HFC refrigerants. The departments will continue to properly dispose of HFC refrigerants under the DPWES-Solid Waste Management program.
6. Refer to the Land Use Policy Committee for consideration:								



Fairfax Green Initiatives #2 Implementation Matrix

Fairfax Green Initiatives #2								
Action Item	Lead Dept.	Partner(s)	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
						CY2020	CY2021	
6a. Require energy use disclosures on residential home sales. Direct the County Attorney to provide legal review for considerations.	OCA	DPD		X			X	OCA determined that legislation passed in the 2020 General Assembly, requiring a seller of a residential property to disclose that a buyer may obtain a building energy analysis, does not require the seller to provide an energy cost and consumption history. Additional legislation would need to be passed in the General Assembly to impose the requirement on sellers or authorize localities to do so.



Fairfax Green Initiatives #2 Implementation Matrix

Fairfax Green Initiatives #2								
Action Item	Lead Dept.	Partner(s)	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
						CY2020	CY2021	
6b. Direct DPD to evaluate and report to the Land Use Policy Committee on further strengthening the County's Comprehensive Plan policy regarding provisions for EV ready or EV infrastructure during the rezoning process in private parking facilities.	DPD	LDS		X			X	<p>As part of the Zoning Ordinance Modernization (zMOD) project, Electric Vehicle Charging (EVC) has been proposed as a new use to encourage EV usage in the County. Draft zoning changes were presented at a July 2020 Land Use Policy Committee and public hearings are expected to take place in early 2021.</p> <p>DPD and LDS have been developing a set of recommended EV infrastructure requirements and EV parking space rates that may be appropriate with various types of development. LDS has a study underway, expected in 2022, that will examine EV parking space rates and infrastructure needs. Updates will be coordinated with the Land Use Policy Committee and the Planning Commission's Environmental Committee. Following their consideration, DPD will review the Green Building policy for potential changes that would result in updated guidance for this item.</p>



Fairfax Green Initiatives #2 Implementation Matrix

Fairfax Green Initiatives #2								
Action Item	Lead Dept.	Partner(s)	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
						CY2020	CY2021	
6c. Direct DPD and the County Attorney to provide a report analyzing requirements and impediments for new commercial construction and incentives for new residential construction to incorporate community solar and/or geothermal systems in project planning.	DPD LDS	OCA		X			X	<p>Solar Power Facilities and Solar Collection Facilities are new uses proposed as part of zMOD to more readily incorporate solar projects into County and other community facilities, commercial construction projects and individual residential sites.</p> <p>The County has processes in place to expedite reviews for solar and geothermal systems and permitting costs are waived for residential and commercial solar systems. LDS provides guidance on residential solar systems for customers through a publication that addresses ways to ease the permitting process and typical design details that can limit expenses associated with developing approvable design documents. LDS is in the process of developing a similar publication for geothermal systems and expects this will be available for customers in mid-2021. LDS will develop an outreach campaign aligned with the solar and geothermal publications to support customers who desire to install these systems.</p>



Fairfax Green Initiatives #2 Implementation Matrix

Fairfax Green Initiatives #2								
Action Item	Lead Dept.	Partner(s)	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
						CY2020	CY2021	
6d. Direct DPD to provide a report for ways to encourage and incentivize developers and builders in the County to adopt or accelerate residential and commercial green building practices. For example, create a green building profile that builders and developers can receive a rating on their green building practices.	DPD LDS		X					DPD and LDS have determined that the creation of a Fairfax County Green Building Profile would duplicate existing third-party certifications and rating systems, and as such, the agencies suggest such a profile not be developed.
7. Direct the County Executive to:								



Fairfax Green Initiatives #2 Implementation Matrix

Fairfax Green Initiatives #2								
Action Item	Lead Dept.	Partner(s)	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
						CY2020	CY2021	
7a. Report to the Environment Committee on the feasibility of creating an Energy Efficiency Funding Pool (EEFP) pilot. Consider potential Public Private Partnerships (PPP), existing non-profit housing partnerships and other energy efficiency-focused organizations to provide a competitive grant process for funding local entities to provide workforce energy efficiency and weatherization (green jobs) training opportunities while upgrading the energy efficiency on eligible low-income and seniors homes.	DEI	CSB FCRHA OEEC OSM		X			X	DEI is researching examples of similar initiatives from other jurisdictions. In addition, DEI is working with the Economic Development Authority to understand the green jobs baseline in Fairfax County and intends to engage with the Department of Family Services to understand any occupation data or labor projections from the workforce development side, as well as any existing training programs to support those.
7b. Report to the Environment Committee on the feasibility of creating a Fairfax Green Bank.	DOF	DEI DMB OCA OEEC		X			X	OCA determined that the Board lacks enabling authority to establish a Fairfax Green Bank. A memorandum, expected in November 2020, will provide additional information for the Board's review and consideration.
8. Direct the County Executive and County Attorney to:								



Fairfax Green Initiatives #2 Implementation Matrix

Fairfax Green Initiatives #2								
Action Item	Lead Dept.	Partner(s)	Complete	Ongoing	CECAP	Anticipated Consideration		Action to Date
						CY2020	CY2021	
8a. Report to the Board on the feasibility and legality of providing guidance to Fairfax County retirement fund managers to increase support for non-greenhouse gas emitting energy investments, local green business investments and decreasing those in fossil fuels.	OCA	Retirement Administration Agency	X					OCA determined that the Board may lawfully provide guidance to Fairfax County retirement fund managers on increasing support for non-greenhouse gas emitting energy investments and decrease support for fossil fuels. However, legal difficulties could arise if mandates or limitations on investment choices are imposed.